

## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.



62.27

# WHAT TO PLANT

The following varieties are the best for this section of the country. Those marked (\*) are our first choice.

**Summer Apples.** \*Yellow Transparent, \*Duchess, \*Benoni; Red Astrachan, Red June, Lowland Raspberry, Chenango Strawberry.

**Fall Apples.** \*Wealthy, \*Fameuse, \*Dyer, Coles Quince, Lowell, Ramsdell Sweet, Maiden Blush.

**Winter Apples.** \*Jonathan, \*Delicious, \*Grimes Golden, \*Gano, \*N. W. Greening, \*Stayman, \*Roman Stem, \*York Imperial, \*Rawles Janet, \*Talman Sweet, Ben Davis, Wine-sap, Scotts Winter, Ingram, Black Annette.

**Crabs.** \*Hyslop, \*Whitney No. 20, Gen. Grant.

**Pears.** \*Lincoln, \*Kieffer, \*Dwarf Duchess, Bartlett, Duchess D'Angouleme, Flemish Beauty.

**Peaches.** - Bokara, Champion, Elberta.

**Cherries.** - \*Ea. Richmond, \*Montmorency, \*Dyehouse,

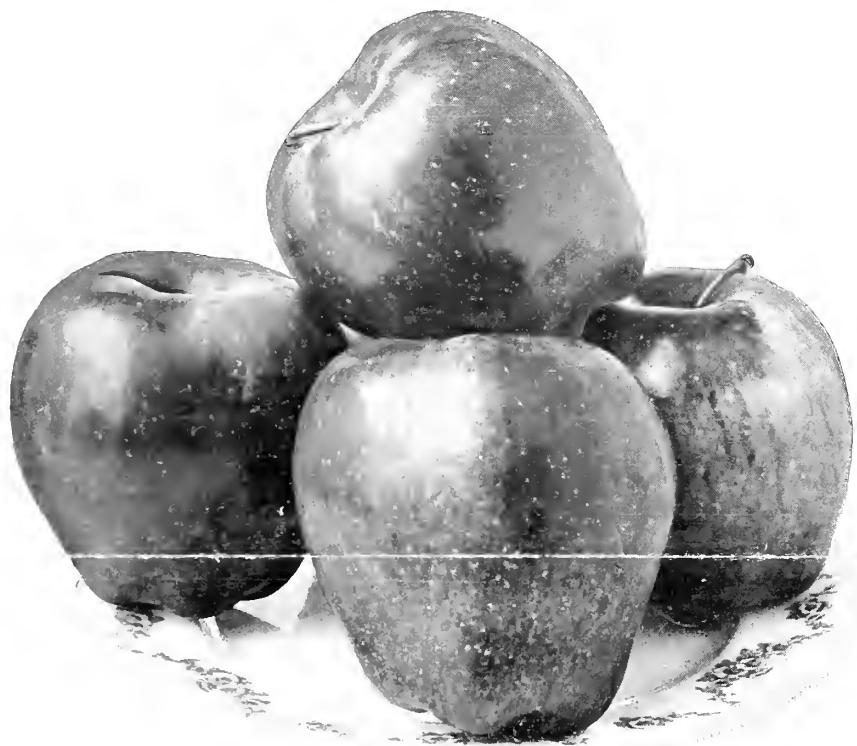
Ostheimer, Wragg.

**Plums.** \*DeSoto, \*Stoddard, \*Terry, \*Wolf, \*Wyant,

Abundance, Burbank, Damson, Green Gage, Lombard, Mil-

ton, Wild Goose.

**Hybrids.** \*Hanska, \*Opata, \*Sapa, \*Toka, \*Compass.



**Grapes.** \*Agawam (Red), \*Brighton (Red), \*Moore's Diamond (White), \*Poeklington (Yellow), \*Concord (Purple), \*Moore's Early (Purple), \*Worden (Purple), Campbell's Early (Purple).

**Gooseberries.** - \*Downing, \*Pearl, Red Jacket, Houghton.

**Currants.** - \*Cherry, \*Fay's Prolific, \*Pomona, \*White Grape, Black Naples.

**Raspberries.** - \*Cumberland, \*Columbian (Purple), \*St. Regis (Red Everbearing), Gregg, Kansas.



**Blackberries.** \*Snyder, \*Mersereau, Lueritia Dewberry.

**Strawberries.** \*Sen. Dunlap, \*Progressive (Everbearing), Warfield, Bederwood.

**Windbreak Evergreens.** \*Norway Spruce, \*White Pine, \*Scotch Pine.

**Ornamental Evergreens.** \*Koster's Blue Spruce, \*Colorado Blue Spruce, \*Black Hills Spruce, \*Concolor Fir, \*Pyramidalis Arbor Vitae.

**Hedging.** \*Amoor River Privet, \*Berberry Thunbergi, \*Russian Olive, \*American Arbor Vitae (Evergreen).

**Shade Trees.** \*White Ash, \*Catalpa Speciosa, \*White Elm, \*Carolina Poplar, \*American Linden, \*Sycamore, \*Eur. Mt. Ash, \*Horse Chestnut, \*Oak Leaf Mt. Ash, \*Norway Maple, \*Sugar Maple, \*Schwedlers Maple.

**Ornamental Deciduous Trees.** \*Cut-leaved Weeping Birch, \*Catalpa Bungei, \*Camperdown Elm, \*Tea's Weeping Mulberry, \*Bechtel's Flowering Crab, \*Red Bud.

**Rhubarb.** \*Linnaeus. **Asparagus.** \*Conover's Colossal.

A large collection of roses, climbing vines, ornamental shrubs, hardy perennials, peonies, bulbs, etc.



## EVERGREEN WINDBREAKS



### Norway Spruce

**Norway spruce** enough to spread the roots then plant as solid as you would a post, tramping the dirt solidly around the tree but leaving the top inch of soil loose so the ground will not crack. Be sure to keep the roots moist while planting and do not allow the sun or wind to get to them. After planting cultivate them thoroughly for two or three years, and your windbreak will be assured.

CERTAINTY evergreens were never finer than they are this season, and you get them fresh from the soil and full of life. Plant them as we have directed, and you are bound to succeed.

Nearly every farm in Iowa needs an evergreen windbreak. With land worth from three to four hundred dollars per acre, a farmer cannot afford to use from one to three acres for a grove of forest trees when evergreens will make a far better windbreak and take up not more than one-tenth the same amount of land. There is nothing we offer which will add more to the value of land and save more money for the man who has it, than an evergreen windbreak.

The greatest mistake in the planting of a windbreak is to plant the evergreens too close, with the result that when the trees come to maturity the lower limbs die and leave room for the wind and snow to sweep under. If there is room for only a single row, the evergreens should be set eight feet apart; if a double row, they should be fourteen feet apart in the row and the rows twelve feet apart; and if more than two rows, they should be sixteen feet apart in the row and the rows twelve feet apart. When more than one row is planted the evergreens in one row should alternate with those in the rows on either side so there will be no vacant spaces.

Do not plant evergreens among other trees or in sod. Prepare your ground as you would for corn, dig a hole large enough to spread the roots then plant as solid as you would

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## Why you should

Certid

# Nursery

FIRST—*Quality.* CERTAINLY  
absolutely in every way. Above all  
when you plant a tree that it will grow  
purchase. The nurserymen  
because certain unscrupulous dealers  
mislabelling their trees and pots.  
damnation and the guilty ones would  
planters would confine their purchase  
reputation, there would be no such  
the word of some unknown, dishonest  
flashy, false allurements in a glibly  
the planter is deceived, and the next  
years just what he has purchased give  
better opportunity to carry on a un-

CERTAINTY nursery stock is always will. To show our confidence you plant an orchard consisting of a time of planting send us a plan the written guarantee to the effect that if to label, we will refund ten times the

SECOND—*Price.* CERTAINTY  
it is worth. We conduct our business  
figure the cost of doing business, and  
We discard all trees and plant which  
way. If they would not be satisfactory,  
we believe they should be burnt in  
are for the very best quality of gas.

When buying CERTAINTY check it until you have had a chance to see that it is in good condition and do not ask us to send you more than one. A CERTAINTY tree or plant must be sent back for it.

THIRD—*Service.* We have  
out the Middle West, honest,  
is to call upon you, examine your  
gardens, and give you information  
plants. All this is without charge.  
at any time for information regarding  
pruning tools, etc.

Hold your order for trees and lawns  
representative. In this way, you can  
orchards and lawns possible, if you  
of a nursery company which is built  
honest dealing since its organization.

Remember the name—CERTIN  
sold by

# CENTRAL WAUKEE

# should buy nty y Stock

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always proved true to label and fence in it, we agree that in case of at least fifty trees and at the of the orchard, we will furnish a t if any tree should prove untrue the amount of the cost of the tree.

nursery stock is sold for just what ness as economically as possible, and fix our prices accordingly, which are not first class in every ory in our own orchards or lawns, instead of sold. So, our prices es and plants.

ck you are not asked to pay for examine it and see for yourself size and grade ordered. We do then take whatever we send you. nt please you or you need not pay

incompetent representatives through intelligent, men whose business it orchards, lawns and small fruit as to the care of your trees and Besides, we are at your service rding sprayers, spray materials.

lants each year until you see our can be sure of having the best you will have the co-operation built up a wide reputation for on in 1878.

NTY nursery stock, grown and

## NURSERIES, IOWA

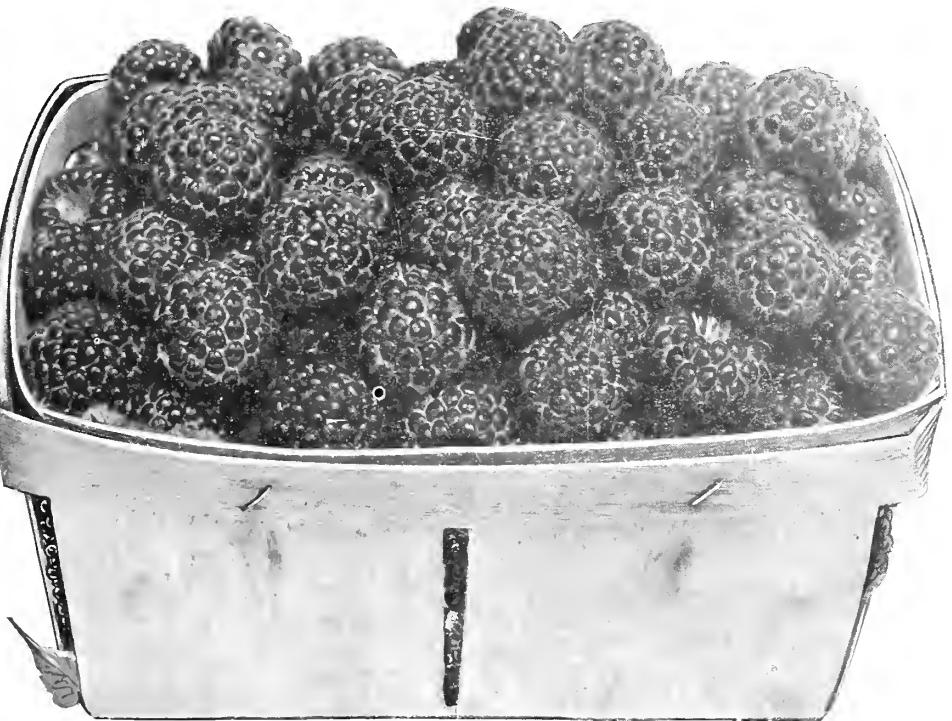
### SMALL FRUITS

Strawberries, raspberries, blackberries, currants and gooseberries are, to the majority of folks, luxuries. We wonder at this fact when we know that everyone has facilities to produce an abundant supply, not only for the fresh fruit, but also for preserving for winter use. From experience and observation, our opinion is that most people do not realize how simple and easy it is to grow small fruits, and how valuable they really are. A little space in the garden will furnish sufficient for the average family. Here are planting instructions:

Strawberries should be planted eighteen inches or two feet apart in the rows and the rows should be four feet apart.

Raspberries and Blackberries should be thirty inches apart in the rows and the rows seven or eight feet apart. Raspberries should be planted very shallow; blackberries deep.

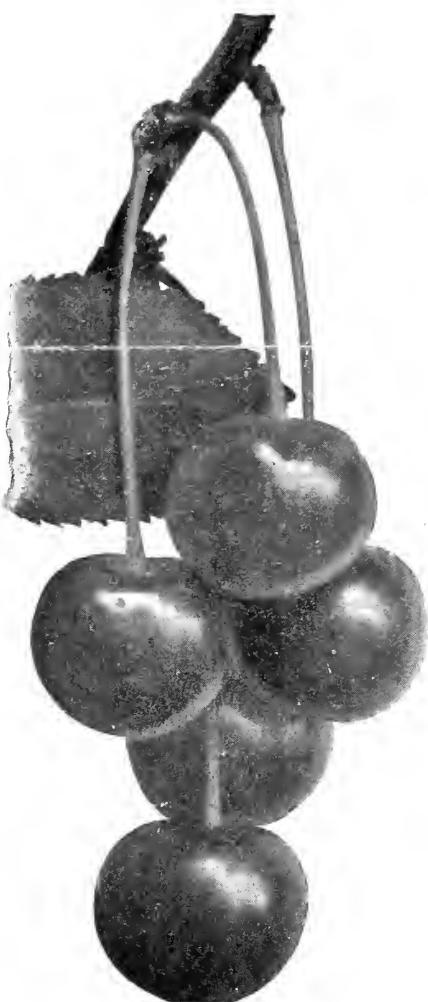
Grapes should be eight feet apart; currants and gooseberries five feet. Grapes, currants and gooseberries should be planted a little deeper than they were in the nursery.



Cumberland Raspberries



Senator Dunlap Strawberries



Early Richmond Cherries

### CHERRIES AND PLUMS

These fruits are extensively planted each season and yet the demand is always large because cherries and plums produce large crops throughout this section of the country. In fact, the Americana plums are natives of Iowa and the Middle West and thrive in the soil which we have here. No fruits are more in demand for canning and preserving than these and they deserve the popularity which they have. Whenever you have a vacant place on your home grounds, plant a cherry or plum tree. It will pay for itself many times over. We want to call your attention to our Hybrid fruits. Some of them are crosses between cherries and plums, others between apricots and plums, and they please the planter because of their rich flavor and their early bearing. Most of them bear in the nursery row. Give them a trial.



Sapa Plums



## EVERGREEN WINDBREAKS



Norway Spruce

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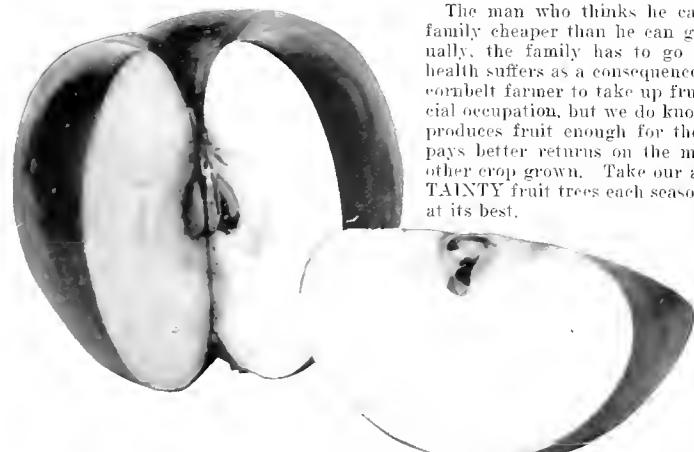
CERTAINTY evergreens were never finer than they are this season, and you get them fresh from the soil and full of life. Plant them as we have directed, and you are bound to succeed.



Yellow Transparent

## THE ORCHARD

The man who thinks he can buy the fruit for his family cheaper than he can grow it is mistaken. Usually, the family has to go without fruit and their health suffers as a consequence. We do not advise the cornbelt farmer to take up fruit growing as a commercial occupation, but we do know that an orchard which produces fruit enough for the use of his own family pays better returns on the money invested than any other crop grown. Take our advice, plant a few CERTAINTY fruit trees each season and keep your orchard at its best.



Stayman

## Why you should buy

# Certainty

## Nursery Stock

**FIRST—Quality.** CERTAINTY trees and plants are guaranteed absolutely in every way. Above everything else, you should know when you plant a tree that it will prove to be exactly what you purchase. The nurserymen in general have been condemned because certain unscrupulous dealers have defrauded planters by mislabeling their trees and plants. This practice deserves condemnation and the guilty ones should be punished. However, if planters would confine their purchases to firms with an established reputation, there would be no trouble. It is only when he takes the word of some unknown, dishonest tree "shark," or believes the flashy, false allurements in a highly-colored nursery catalog, that the planter is deceived, and the fact that he cannot know for a few years just what he has purchased gives a dishonest dealer all the better opportunity to carry on his underhanded work.

CERTAINTY nursery stock has always proved true to label and always will. To show our confidence in it, we agree that in case you plant an orchard consisting of at least fifty trees and at the time of planting send us a plat of the orchard, we will furnish a written guarantee to the effect that if any tree should prove untrue to label, we will refund ten times the amount of the cost of the tree.

**SECOND—Price.** CERTAINTY nursery stock is sold for just what it is worth. We conduct our business as economically as possible, figure the cost of doing business, and fix our prices accordingly. We discard all trees and plants which are not first class in every way. If they would not be satisfactory in our own orchards or lawns, we believe they should be burned instead of sold. So, our prices are for the very best quality of trees and plants.

When buying CERTAINTY stock you are not asked to pay for it until you have had a chance to examine it and see for yourself that it is in good condition and the size and grade ordered. We do not ask you to send us your money then take whatever we send you. A CERTAINTY tree or plant must please you or you need not pay for it.

**THIRD—Service.** We have competent representatives throughout the Middle West, honest, intelligent, men whose business it is to call upon you, examine your orchards, lawns and small fruit gardens, and give you information as to the care of your trees and plants. All this is without charge. Besides, we are at your service at any time for information regarding sprayers, spray materials, pruning tools, etc.

Hold your order for trees and plants each year until you see our representative. In this way, you can be sure of having the best orchards and lawns possible, and you will have the co-operation of a nursery company which has built up a wide reputation for honest dealing since its organization in 1878.

Remember the name—CERTAINTY nursery stock, grown and sold by

**CENTRAL NURSERIES,  
WAUKEE, IOWA**

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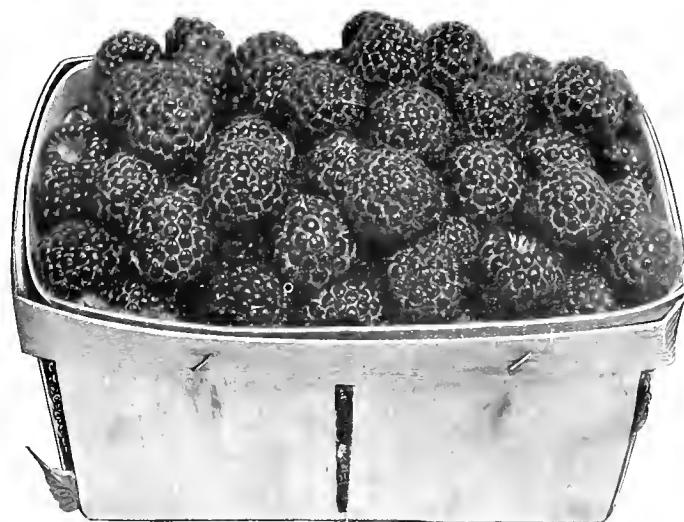
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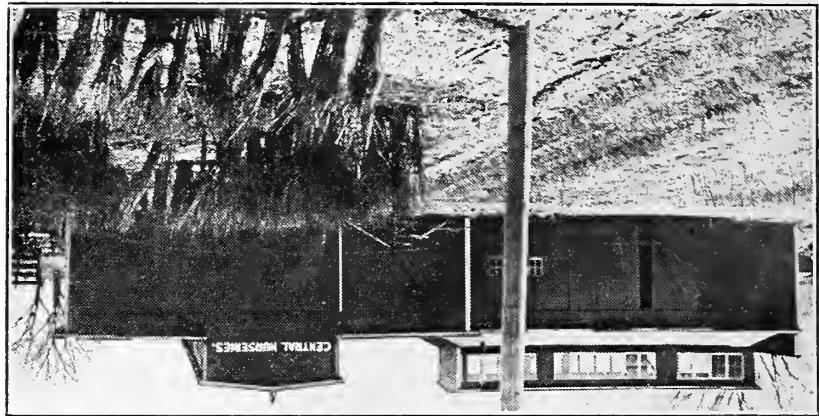
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Sapa Plums



#### WHAT TO USE.

**Bordeaux Mixture.** This is the most popular and effective fungicide used. You can make it easily at home. The materials needed are lump lime, copper sulphate (blue vitriol) and water, which are mixed in the proportion of three pounds of the lime and three pounds of the blue vitriol to fifty gallons of water. To make it properly, slack the lime in just enough water to cover it thoroughly, then dissolve the blue vitriol in the same way using another vessel for the purpose. Allow these to stand for about one-half day, then pour the lime into the vessel containing the blue vitriol and add sufficient water to make the proper amount of spray mixture. It is a good idea to allow this to stand ten or twelve hours so that it will be properly blended. Frequent stirring of the mixture helps greatly.

**Lime Sulphur.** This is a fungicide similar to Bordeaux Mixture but generally considered not quite so good. However, it will control scale which Bordeaux will not do. The two mixtures should never be used together. Lime sulphur should never be used on grape vines. This can be purchased already prepared and should be used in the proportion of five quarts to fifty gallons of water.

**Arsenate of Lead.** This is a poisonous material which can be purchased either in paste form or as a dry powder. The powder is higher in price but is twice as strong as the paste, and so only half as much is needed. This is used extensively for insects which have biting mouth parts and chew the foliage. It is mixed with either Bordeaux Mixture or Lime Sulphur in the proportion of two pounds of paste or one pound of powder to fifty gallons of the other spray material.

**Nicotine Sulphate.** This is a poisonous liquid which can be purchased easily and is used for insects which do not chew the foliage, but suck the juices from the leaves and thus injure the plants. It is mixed with either Bordeaux Mixture or Lime Sulphur in the proportion of one-half pint to fifty gallons of spray solution.

## SPRAYING

To secure the best results from fruit trees and plants, it is necessary to spray them. You could not expect a good corn crop without giving it the necessary attention; neither would your live stock be profitable if you did not give it proper care. Your fruit trees and plants do not need as much care as your other crops, but if you do give them the attention required, nothing will pay you better.

During the growing season, trees and plants have three duties to perform, viz., first, feed the insect pests and the diseases that live upon them; second, mature, if possible, a crop of fruit; third, produce fruit buds for the next year's crop. By spraying at the proper time, you rid the tree of its enemies to a great extent and allow it to expend its strength in maturing the crop of fruit and laying the foundation for the future production.

In the case of apple trees, it has been demonstrated that sprayed trees produce 2.8 times as many bushels of apples as unsprayed ones. This is clear profit for the man who sprays. Besides this, trees which are shy bearers or which bear only in alternate years are brought into constant heavy bearing. So, we cannot urge too strongly the necessity of spraying. One season will prove to you how profitable it is, but you will not realize the greatest value from it unless you spray each season at the proper time. It can be done without taking any time from your other farm work, and is immensely profitable.

#### HOW MUCH TO USE.

This depends upon the size of the trees and whether the spray is to be heavy or light. However, it is estimated that for each apple tree from twelve to twenty years old, about four gallons of spray mixture is required for each application. With this as a basis, it is not hard to figure how much of each material will be needed, but always be sure to keep the right proportion.

#### WHEN TO SPRAY.

**First Spray.** Just as blossoms are showing pink and before they open. If your trees are affected with scale, use lime sulphur at the rate of five gallons instead of five quarts to fifty gallons of water. If scale is not present, Bordeaux mixture can be used. If you noticed the plant lice on your trees or plants the preceding year add the nicotine sulphate also.

**Second Spray.** When 95% of blossoms have fallen. Use lime sulphur and add the arsenate of lead. Bordeaux mixture may be used instead of lime sulphur.

**Third Spray.** Two or three weeks after second spray. Use bordeaux mixture or lime sulphur and add the arsenate of lead.

**Fourth Spray.** The latter part of July or fore part of August. Use bordeaux mixture and make it stronger by putting in an extra pound of lime and also an extra pound of blue vitriol. Add the arsenate of lead.

The plum and cherry should be sprayed earlier than the apple, as they bloom earlier. The fourth spray need not be applied to early summer apples, plum or cherry; and the third and fourth sprays may be omitted without serious results, but the first and second are absolutely essential.

Gooseberry and currant "worms" can be destroyed by spraying with arsenate of lead at the rate of four pounds to fifty gallons of water.

Strawberry leaf rollers can be checked with bordeaux mixture and arsenate of lead.

Plant lice on rose bushes can be destroyed by using nicotine sulphate at the rate of one-half pint to fifty gallons of water.

Write us at any time for information and prices on sprayers and spray materials.